a liquid medium in which the B cell is immersed, the liquid medium receiving the antigen to be detected; and

an optical detector arranged for receiving the photon emitted from the cell.

B' cont.

2. (Amended) The device of claim 1, further comprising a covering [for supporting] for the detector, the covering separating the liquid medium from the detector.

4. (Amended) The device of claim 1, further comprising a housing enclosing the liquid medium.

5. (Amended) A device for detecting the presence of an antigen, comprising:

a B cell having antibodies which are expressed on the surface of the B cell and are specific for the antigen to be detected, wherein binding of the antigen to the antibodies results in an increase in calcium concentration in the cytosol of the B cell, the B cell further having an emitter molecule which, in response to the increased calcium concentration, emits a photon;

B 2

a liquid medium in which the B cell is immersed; and

an optical detector arranged for receiving the photon emitted from the B cell, wherein the optical detector is [affixed] adjacent to the liquid medium [containing the cells].

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